Kindergarten Teachers' Perspectives on Developmentally Appropriate Practices (DAP): A Study Conducted in Mumbai (India)

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Abstract:

A qualitative study examining teachers' beliefs regarding developmentally appropriate practices was conducted in the city of Mumbai, India. Twelve kindergarten teachers were interviewed for this study, and a constant comparative method was used to analyze the interviews. Six themes were identified within this study. The themes highlighted distinct differences between American and Indian cultures, as well as striking similarities, and pinpoint the importance of culture as the foundation for classroom practices. Themes included a focus on academics vs. play, the importance of worksheets, the importance of groups for socialization, and the difficulties of implementing a play-based curriculum. The description of these themes and its implication for the early childhood care and education of India are discussed in detail.

Keywords: Early Childhood Education | Educational Methods | Curriculum | Teachers | India

Article:

The position statements on developmentally appropriate practices (DAP) published by the National Association for the Education of Young Children (NAEYC) have strongly influenced the field of early childhood care and education (Bredekamp, 1987; Bredkamp & Copple, 1997). DAP is based on a child-centered philosophy of education that espouses the idea that children actively learn and construct their own knowledge by interacting with peers, teachers, and materials. It is assumed by many that in any country, DAP can serve as the minimum foundation for quality and be measured as a parameter of quality (La Paro, Sexton, & Synder, 1998). These quality practices are important, as they are known to influence children's development. Research has revealed that children placed in these developmentally appropriate classrooms in the United States are more socially mature, less stressed, more creative, and show greater affinity towards school, than children who are placed in developmentally inappropriate classrooms (Burts et al., 1992; Hirsh-Pasek, Hyson, & Rescorla, 1990; Jambunathan, Burts, & Pierce, 1999). Thus, DAP's positive impact on children's development has popularized this concept in various westernized
countries around the world. However, DAP's interpretation and its implementation by classroom teachers has long been debated in the field.

**Debate Regarding Developmentally Appropriate Practices (DAP)**

A number of scholars in the field (Cannella & Viruru, 2004; Delpit, 1995; Grieshaber & Cannella, 2001; Lubeck, 1998; O'Brien, 1996) have criticized and questioned the concept of DAP. DAP is considered by many to be a predominantly Euro-American middle class construct that has limited generalizability across various cultures. Researchers are urged to reinterpret DAP in light of the needs of the culture and population of a particular country. For example, in a populous country like India, the concept of small group size is understood quite differently. A preschool classroom with 40 children is considered small and manageable for the teachers (Gupta, 2004). Similarly, it is not unusual for preschool children to have silent lunch time in Taiwan (Hsieh, 2004). Maintaining silence while eating food is part of the Taiwanese tradition, and children are made to follow this tradition at school.

Lubeck (1998) questions the simplicity with which researchers distinguish teachers' beliefs and practices as DAP (developmentally appropriate practices) or DIP (developmentally inappropriate practices). Typically, these categorizations are based on little insight from the teachers regarding their performance in the classroom or their interpretation of DAP. On the other hand, scholars have refuted the logic that DAP guidelines are prescriptive and definite (Copple & Bredekamp, 2008). In the revised NAEYC position statement on developmentally appropriate practices, researchers state that such terms as "academics," "use of packaged curricula" (often regarded as developmentally inappropriate practices), and others need to be reexamined and understood within the educational context. Thus, many practices, such as group work or testing children, may be justified or warranted based on the needs of the culture and the purposes they serve within that context. Nevertheless, a predominance of group instruction and use of packaged curricula in a classroom may not serve the purpose of education for all children. Charlesworth (1998), in her article "Developmentally Appropriate Practice Is for Everyone," explains how the concept of DAP transcends an individual's socioeconomic status, culture, race, gender, age, or special needs. Giving several examples validated by research, she explains how the concepts of DAP are universal and beneficial for all children between the ages of birth-8.

In summary, the DAP guidelines are often viewed as applicable to classroom settings, teachers, and children around the world. However, many question the appropriateness of DAP across cultures. Critics supporting the idea of DAP assert that the concept of DAP is not prescriptive, but serves as a guideline that may be used by teachers to guide their practices in the classroom. The working group that has undertaken the task of revising the NAEYC position statement on DAP acknowledges the need to reconsider terminology.

Some researchers have suggested that teachers should have a greater role in explaining the cultural context of their classroom and how this fits with their notion of DAP. These issues are
particularly relevant in India, where DAP is espoused by many in higher education as best practice for Indian children. However, there is still much disagreement in classrooms about how it should be implemented in a manner that is sensitive to the Indian culture, rather than catering to a Western educational philosophy.

*Teachers' Beliefs and Practices Regarding DAP Conducted in Other Countries*

The Teacher Questionnaire (Charlesworth, Hart, Burts, & Hernandez, 1991) has been widely used in other countries to study teachers' beliefs and practices regarding DAP. Doliopoulou (1996) investigated Greek kindergarten teachers' beliefs and practices regarding DAP, and found that teachers' DAP beliefs highly correlated with their practices. Teachers who perceived parents and themselves to be in control of the curriculum were more developmentally appropriate in their beliefs and practices. On the other hand, teachers who felt threatened by state regulations and mandates indulged in inappropriate practices. Additionally, teachers with larger classes and more experience manifested inappropriate beliefs. Suh (1994) compared Korean parents', principals', and teachers' beliefs and values regarding public kindergarten programs and practices. It was found that teachers were more developmentally appropriate in their beliefs than parents or principals. Additionally, teachers with higher levels of education and background in early childhood education were more developmentally appropriate in their beliefs and knowledge pertaining to DAP. Kim, Kim, and Maslak (2005) investigated Korean kindergarten and child care teachers' understanding and use of DAP, using the Teacher Questionnaire. They found that kindergarten teachers believed in DAP and also practiced DAP activities in their classroom settings, as compared to child care teachers. Thus, these studies conducted in different countries pinpoint various similarities across cultures, such as that higher levels of teacher education or background in early childhood can influence teachers' beliefs and practices regarding DAP in a positive direction. In this study, we attempt to explain teachers' interpretation of DAP and its applicability to the Indian culture.

*Early Childhood Care and Education (ECCE) in India*

Early childhood care and education in the Indian context encompasses a range of services within diverse settings that are provided to children under the age of 6. The Integrated Child Development Services (ICDS), which is funded by the central government of India, renders its services to young children as well as to pregnant and lactating mothers. These services aim to fulfill the health, nutritional, and educational needs of children and their families from disadvantaged backgrounds. The success of ICDS in combating problems related to malnutrition, school dropout, and morbidity has been well documented in the literature (Boocock, 1995; Government of India, 1997).

In India, the early childhood care and education system is divided into two different components, namely, child care and preschool education. "Child care" refers to full-day programs that are provided for children who have working parents (Datta, 1998). The main focus of this program is
on custodial care. A lack of focus on education and the low quality of early stimulation provided to children within these programs have been areas of concern within the field (Rao & Sharma, 2002).

"Preschool/kindergarten education" usually refers to programs that are more educational in their focus (Boocock, 1995; Rao & Sharma, 2002). For some children, preschool education in India begins at the age of 2 1/2. These children attend nurseries or play schools; these play schools are generally run by private parties. Recently, however, many nurseries or play schools have become associated with government semi-aided schools. Although these nurseries may not receive direct assistance from the Indian government, they are connected to the semi-aided schools (such as kindergartens, elementary (primary), and higher secondary education high schools). Thus, children placed in these nurseries can directly transition to the kindergarten, elementary (primary), and later secondary (high school) within the same schools.

Preschool/kindergarten schools in India are meant for 4- and 5-year-old children. Four-year-olds are placed in lower kindergarten, while 5-year-olds are placed in the upper kindergarten. Thus, kindergarten lasts for two years in India. Subsequently, at age 6, these children transition to the primary or elementary grades. All the kindergarten programs found in urban areas are half-day programs that run for 2-3 hours, five days a week. These kindergarten programs operate within the same schooling complex that has primary and secondary classrooms. Thus, if parents choose to enroll their children in a particular school's kindergarten and choose to continue their child's education in that school, the child can complete his or her entire schooling in that school and then transition to college. Figure 1 (see Appendix A) illustrates a complete picture of the ECCE system in India. Thus, the early childhood education system of India is divided with regard to the care and education of young children. Child care in India is essentially custodial in nature, while preschool or kindergarten programs have an educational bent to them.

*Teachers' Education and Training in Early Childhood in India*

One of the issues facing the early childhood education system in India is that teachers with a bachelor's degree from any field (banking, science, fine arts) can become an early childhood educator after completing a diploma in early childhood education (Hegde & Cassidy, in press). Teachers can acquire a diploma after a brief training of 6 months to 1 year from any governmental, non-governmental, or private college in India. Early childhood scholars in India have expressed concerns regarding the short period of training and inadequate preparation of teachers (Swaminathan, 1998). This practice still persists, however, due to a teacher shortage in India and demand for more early childhood educators. Thus, it is possible that such ill-prepared teachers' might not fully grasp the concept of DAP.

Second, teacher training programs in India seem to be divorced from reality (Kaul, 1998). Training programs emphasize the concept of child-centered or play-based education, which is derived mostly from Western standards, giving little or no importance to culturally appropriate
practices or examining how feasible these practices are in reality. For example, training centers discuss the importance of being individually appropriate and understanding the individual needs of the children, but they never discuss how teachers can practice this philosophy in a classroom with large group sizes (for example, 60-70 children in one classroom). Thus, teachers must contend with a teacher training system that advocates for developmentally appropriate practices and educational system, yet does not provide an opportunity for teachers to implement these practices.

To conclude, researchers acknowledge that implementing DAP across cultures is a controversial issue that needs to be closely examined from varying perspectives. Nonetheless, the principles of DAP have influenced preschool practices and curricula all around the world, including India. So it becomes very important that we contextualize DAP within the Indian setting. It is also important for teachers to have an opportunity to voice their concerns, opinions, and understanding of DAP, and to consider what aspects of DAP are applicable to their classroom settings and those that need to be changed. Thus, this study served as a platform for Indian teachers to voice their opinions and concerns regarding DAP.

Method

Understanding Mumbai City

The present study was conducted in the urban city of Mumbai, located in the state of Maharashtra and the western region of India. Mumbai, a predominantly cosmopolitan city of India, is divided into four zones: east, west, central, and south. Each of these zones has its own peculiar characteristics in terms of socioeconomic status (e.g., South Mumbai is considered to be more affluent and the standard of living is notably higher than the east part of Mumbai). Hence, to capture the essence of the different parts of Mumbai, it was essential to choose schools from all the different zones of Mumbai.

Further, only schools that were identified as middle-income to higher middle-income within the four zones of Mumbai were included in the sample. Low-income schools were excluded from the study for two reasons: 1) Schools that cater to the needs of low-income children in India are generally government schools that have limited resources (e.g., in terms of equipment or materials) for the teachers and children in the classroom. Thus, the probability that this kind of sample might skew teachers’ interpretation and implementation of DAP was high. 2) Generally, government schools do not use English as a medium of instruction. In the present study, however, it was required that teachers be able to communicate (read, write, and speak) in English. Thus, the study only included teachers who worked in English-medium schools and were proficient in English.

Participants
Three teachers from each zone of Mumbai, one working in lower kindergarten and two working in upper kindergarten, were selected to participate in the study. A total of 12 teachers working across both grade levels participated in the study. All of the participating teachers were female. The youngest teacher was 22 years old, while the oldest teacher was 54 years old. Seven of the 11 teachers (one was missing from the data) were Hindus, 3 Muslims, and 1 Christian. One of the teachers had some college education while the others held a bachelor's degree. Four of these teachers had a background in commerce (banking and bookkeeping), 5 in the arts, and 2 in science. All of the teachers had completed their one-year diploma in early childhood care and education, and worked in the field of ECCE from 3 to 22 years.

Measure

A self-constructed interview schedule consisting of open-ended questions was used to collect data (refer to Table 1, in Appendix B). Teachers were asked a range of questions, from very general questions, such as, "Describe in general the major needs of the children between the ages of 2-5 years" and "How does your program support and address the needs of these children?", to very specific questions about their reflections on the curriculum that they follow in their classroom, or issues they confront, in implementing a play-based curriculum in their own classroom. None of the questions addressing the teachers directly referred to DAP. Rather, such terms as "play-based education" or "child-centered education" were used to indirectly tap into teachers' notions of DAP. Additionally, Indian teachers are more familiar with the latter words. Each of the interviews was audiorecorded and later transcribed.

Analysis

The constant comparative method (proposed by Glaser and Strauss, 1967) was used to analyze the data for this qualitative study. The process of identifying themes included transcribing the interviews, reading the interviews numerous times, and proceeding toward cross-case analysis of the 12 interviews. Cross-case analysis allowed the researcher to group answers to common questions and review different perspectives on central issues. The themes identified in this study evolved from the data.

Constant comparison also means continuous refinement of the data (Dye, Schatz, Rosenberg, & Coleman, 2000). Thus, themes identified once also were changed to suit and incorporate new ideas stated by the teachers. For example, "play way" versus "talk and chalk" evolved as two approaches toward the curriculum of early childhood care and education in India. However, after reading the interviews numerous times, the "combination method"--a cross between play way and talk and chalk--also emerged as a category within this existing theme. Thus, this new category was included within the broad theme of talk and chalk versus play way.

Results
Six themes were identified from teachers' responses to the interview questions in the present study: Play Way vs. Talk and Chalk, Worksheets as Important and Essential, Group Activities as Socializing Agent, Constraints on Play, Need for Change, and Struggle Between Belief and Practice.

Theme 1: Play Way vs. Talk and Chalk

This evolved as a recurring theme in the answers given by the teachers to the questions in which they discussed the curriculum of their school, the schedule that they follow within their classrooms, and their beliefs regarding implementation of a play-based curriculum. For the purpose of distinction within this study and based on teacher responses, we describe play way classrooms to be less didactic (teacher-directed) and more child-centered in their approach to teaching and learning; talk and chalk classrooms were predominantly didactic in nature. On the other hand, the combination method classrooms seemed to be a blend of play way and talk and chalk classrooms. That is, teachers in these classrooms used some child-centered practices and some teacher-centered activities. Finer distinctions between these classrooms have been explained below.

Play Way Method. In a play way method classroom, children had an opportunity to work in different learning centers for at least 30 minutes every day (5 days a week). Classroom schedules were predictable, and a balance between free-play time, group time, and teacher-directed activities was maintained throughout the day. Fatima explains her play way method classroom:

There is no other school that completely follows a play-based curriculum as we do. In our schedule, first we have greeting time, when children greet each other. Then we have planning time, when children tell us which area they want to go [to]. Then during their work time, they go to the learning areas they have selected. Then we have recall. During this time, children recall what they did in those areas. Then we have snacks. During group time, the teacher does some planned activities. After group time we sing or read stories. Sometimes we have activities during which children jump, sing, or dance. Sometimes we play a game or watch television.

The schedule of this classroom mirrors a typical pre-K or kindergarten classroom that you may see in the United States and is similar to a popular U.S. curriculum that includes plan-do-review.

Talk and Chalk Method. Talk and chalk was a term that was often used by teachers in their responses to such questions as, "What kind of curriculum do you follow in your own classroom?" "Describe the schedule of your classroom," "How easy or difficult is it for you (the teacher) to implement a play-based curriculum in your own classroom?" The term talk and chalk is commonly used in India to describe a more didactic classroom. Thus, teachers often used this word while explaining their academically oriented/didactic classrooms.

From the teachers' various answers, the researcher gathered some understanding of talk and chalk-oriented schools and their curriculum. These talk and chalk schools or classrooms do not
believe in free-play time for children. Instead, the schedule revolves around teacher-directed activities only, and reading and writing is strongly emphasized. Exams form an integral part of the assessment system. One of the teachers, Geeta, explains a talk and chalk classroom. She says,

When they (children) come in the morning, they are fresh, so we start with their writing work, at least for 45 minutes. Children's attention span is only half an hour. So maximum, we teach for 45 minutes to one hour. After writing, we sometimes start with the orals if children are interested (it is part of the classroom schedule). Sometimes we do songs, poems, and stories. So this is our talk and chalk classroom.

Combination Method. These schools have adopted a midway method between play way and the talk and chalk method of education. These classrooms have some free-play time for children (once or twice a week). However, most of the activities in which the children engage are teacher-directed. Writing the ABCs and rote learning (for numbers, for example) form a part of their everyday curriculum. As Sheela, an upper kindergarten teacher, explains;

First we start with the prayer every day. Then we do attendance. Then we have one or two warm-up exercises. Then we have a slot for clay modeling or amusement park ... some activity that is interesting. It's not studies first. Either songs, then we have an AV room where we show them anything that we want to. After that is done, we have them do writing work after we get their full attention. After their writing work and before the break, [the children] are a little bit settled and a little bit disturbed, so we ask them what they want to talk to us about so they sit and we have a chat either on the theme of the month or on ... any [bit of] general knowledge that they want to know: about the prime minister, what is our national song, just a talk, or they want to come tell about their family or what they did on Saturday and Sunday. Then we have our break time from 10:30 to 11:00. They take around 15 minutes to just eat, and the other 15 minutes they play and jump around. Then we have a very sober session like storytelling; there is no writing work. In the last slot of ours, we take them down to the school park for drill and play organized games with them.

Another example,

Here (in school) it is both ways, play way and talk and chalk. Our school finds it difficult to follow the play way totally. So like today, if we have AV (audio visual) in the first block, we go to AV for 10-15 minutes. Later we have writing. Presently we are teaching children [about] standing lines and sleeping lines (instructions that teachers give children when they are trying to write different alphabets in their books or slates). After that, we have a break. Then we do the picture talk on any topic. Now the topic is rain. So the general knowledge topic is something like myself and rain. After this, we do nursery rhymes. Generally, we sing. I think children from nursery and lower [kindergarten]
should sing more because of the words and actions. Through that, they (children) learn language.

From the teachers' responses, we gather that teachers think they do strike a balance between child-initiated activities and teacher-directed activities. Children get few chances to play on their own (free-play time); however, teachers attempt to make the teacher-directed activities more interesting for children by telling a story using a puppet, and by giving them some time to watch TV. (See Table 1, which differentiates the various approaches to curriculum.)

Theme 2: Worksheets as Important and Essential

With two exceptions, all of the teachers agreed that worksheets are very important for children. Teachers explained that worksheets enable them to assess or evaluate children's performance or use it as a recap tool. Geeta (a talk and chalk teacher) said, "Worksheets actually are convenient for the teachers. You get to know if children have learned the concepts that were taught that day. You know how much children have grasped."

Parina said,

It's only through worksheets that we are able to evaluate children. During a group activity you are not able to hunt out or evaluate each child because you get the answer in a group and [some] children ... are quiet. If the teacher has to evaluate a child, she needs to use worksheets. After, say, every lesson or ... twice a week, we give them worksheets.

Some teachers believe that worksheets form a part of the individual activity. That is, a child gets an opportunity to work on his own in a class where there are many other children. Also, worksheets allow parents to see for themselves and understand what their children are doing in the school. Marina said, "Worksheets are important because those are individual activities and parents also need it. They (parents) get to know what the child is doing in the school." Gunjan said, "Worksheets are more individually based, unless you have an art or craft activity, where there is a big picture and where everyone comes and does something in it. Worksheets are more targeted to know whether each child has understood the concept. It's more individualized." Still others believe that worksheets allow children to transition well into the formal system of primary (elementary) education. As Mahi said, "Worksheets introduce children to the formal system of education. Children will need to understand this before they go to primary (elementary) classrooms."

Theme 3: Group Activities as Socializing Agent

Overall, teachers viewed group activities very positively. They believed group activities allow children to develop social skills. Rita said, "Group activities help children, because we come to know how children socialize. They have to wait for their turn. If we give them a car for a transportation project, where children are given car cutouts to work on and glue to the paper,
children have to wait to get their cutout. Through this activity, children learn to wait." Parina said, "Group activities are for children to interact with others, for children to feel free. In a group, children work better. A teacher comes to know which child is a leader and who is a follower."

Similarly, Gunjan said, "We have different corners in the classroom where they (the children) can work in a group. Musical activities are also conducted in a group. This is how children learn social skills. They learn to share things."

*Theme 4: Constraints on Play*

At different points during the interview, the teachers discussed "why implementing play was not easy for them in their own classrooms" or "why play is difficult to implement in the different kindergarten classrooms in India."

*Parents as Barriers.* Most of the teachers identified parents as difficult or unwilling to cooperate with the school philosophy. Teachers believed that parents were lacking in their understanding of play and were more academically oriented. Lata said,

> The problem with play-based education lies in the fact that too many people contradict … the philosophy. Parents might contradict … the philosophy because they themselves have studied in that way; that is, by [lower kindergarten] they were writing in [cursive writing], so now we have to convince them that this is not going to work. If you are confident, then parents will also have confidence in you. We took parent workshops and we made them confident … wait and watch, it will work.

Similarly, Fatima said, "We have to continuously hold workshops for parents and explain to them. We have to hold workshops where they experience it for themselves. We have to do that to make the parents realize that this is important and children should go through these stages." In a similar vein, Marina said, "The challenge has been parents. We don't do number work or writing work separately, so our parents always compare our school with other schools. We always have to assure parents not to worry. They are too scared. Parents are worried for their children, thinking whether they will be able to cope or not."

*Group Size.* Group size was seen as another impediment in the process of implementation of play. Geeta said, "Due to big classroom sizes (50-70 children), we cannot have individual activities for children." Gunjan said, "There is always growth in the classroom and no reductions. Last year we had 50 children; we may have 60 children in the classroom next year." Nasrin openly acknowledged that completely following the premise of DAP or child-centered practice, as delineated by NAEYC, is impossible in India. She said,

> See, we follow at least 90 percent of the play-way method. The 10 percent somewhere gets lost in the curriculum that we have to follow. These formal set-ups and expectations are difficult. Now, you see, we have a project curriculum. Now, in our class, we have 15
i.e. 2:30 children in the classroom. A class of 30 is manageable when I am doing song or
dance activities. However, when I am doing drawing or craft activities on an individual
basis, managing 30 children individually becomes very difficult. So this one-to-one base,
perfect play-way method is not followed. But, yes, we try to do the maximum we can.

No Toys, No Play. The lack of materials or equipment was very frustrating for teachers who
wanted to implement play in their classrooms. Roopa said, "There are no age-appropriate toys
for children in the classroom. Some of the toys that we have in the classroom are so
inappropriate for children that even I don't understand how these play materials work. So how
can you expect children to play with them?" Similarly, Geeta said, "There can be no play without
apparatus. If you want play in the classroom, then every child should have materials to play
with."

Need for Assistance. Teachers believed they need more adults or help in the classroom to handle
and implement play in the right fashion. In classrooms where just one teacher is present, the
teacher wanted an assistant teacher. Sometimes they wanted parents to volunteer in their
classroom. The classroom that had two teachers still indicated the need for an assistant. Having
two teachers was not really working out for their classroom. As Lata said, "I have a teacher, but I
need a helper (who would assist teachers in the classroom); that would make a lot of difference,
and [we] need more equipment and place (physical space). We could then surely work out a
schedule." Geeta (a talk and chalk teacher) said,

I need an assistant teacher, because when I am concentrating on one batch, somebody
will have to concentrate on the other batch. They are small children; they need our
constant attention. I love play, but I need help implementing it.

Theme 5: Need for Change (Recommendations)

Teachers had many recommendations for the Indian government at the end of this interview.
They did mention better group sizes, ratios, need for more equipment, more infrastructure
support, and the need for regulations. The major themes that evolved were the need for
recognition, higher wages for early childhood teachers, and appropriate teacher training.

Most of the teachers reiterated that they need more recognition. They believed they get no
respect as an early childhood teacher, nor are they remunerated for all the work they do with
children. Overall, they said their efforts and hard work get no recognition. Gunjan said,

The teachers should get the same respect as other teachers. The [kindergarten] teacher
does not get the same respect as the secondary (high school) teacher or the university
professor. Even the pay scale is so different. The teachers are doing a lot. They should be
given good pay just like the other teachers. It's not just the satisfaction--they also want
the monetary benefits. If the government takes care of that, the teachers will willingly come and work in the school. They will put in 100 percent; they will not run towards the primary, secondary, or college sections.

Sheela said, "Teachers at the kindergarten level do more work than teachers at the other levels," while Rita said, "Less pay will never allow quality teachers to enter the field of early childhood education." Additionally, some teachers believed that ongoing or inservice training for teachers was necessary. Parina said, "Arrange for teacher training; existing teachers need to be trained. If there are formal teachers, they need to be trained in informal ways of teaching. They do not believe in informal ways of teaching." Mahi believed that "all the teachers should be given more training. They should update themselves. Years together, you should not be doing the same thing. Government should give funds for that."

Theme 6: Struggle Between Belief and Practice

During the interview, the researcher could sense the teachers' struggles in the process of justifying what they want to be doing and what they really are doing in their classrooms. The teachers' replies to the different questions in the interview revealed contradictions. All of the teachers in the study believed that their school philosophy supported and believed in children's holistic development. Further, they believed that their school follows the play way philosophy and they impart education based on children's interests. However, later they agreed that following a play-based curriculum in their own classroom was not very easy. Geeta said, "In our school, it's not just education, but the all-around development of the child is considered very important." However, later she said, "This curriculum (play way) is difficult. We are stressing more on education. Although we say all-around development, we stress more on the studies, so they are confused, you know."

Similarly, Ria strongly opposed the use of worksheets in the classrooms. She said, "I am not for worksheets at all. I am not for the concept of worksheets. Keeping a table in the middle and a group of 10 children working together, I just love it. I normally see that the tables are covered, so whatever mess children want to do with the table covered, they can do. Most of my activities I like to do in a group." When talking about the assessment of the children in the classroom, Ria said,

No, it is just a period when we do it casually (assessment). I don't know about this school. But earlier during the class hours, we used to say to children, do you remember this rhyme? OK, say it. No specific time was set aside for assessment (teacher believes this is an informal way of assessing children). Sometimes we use worksheets for assessment. We just give it to children during the class time.

Similarly, Geeta said she believes in observation as a means of assessment. However, she further justifies and explains the use of examination as a means of assessment in their classroom. She said, "Observing the child keenly is important. In the beginning, the child might be dull, but after
you teach, you can slowly see the change in the child." Later she said, "We have exams to see how much children have grasped the concept, which is also very important."

To conclude, the present study reflects Indian teachers' perspectives and interpretations on DAP. The different themes identified within the study highlight teachers' desire to be developmentally appropriate (Struggle Between Belief and Practice) and the various constraints they face in the process of implementing a DAP curriculum (Constraints on Play). The themes also illustrate the variability that exists within the DAP curriculum (Play Way vs. Talk and Chalk) in India. Finally, teachers' recommendations on the improvement of the education system revolves around such issues as higher wages for teachers, respect for kindergarten teachers, and government acknowledgment that the field of early childhood care and education is an important part of India's education system.

**Discussion**

From various responses gathered during this interview, it was evident that the teachers believe in children's overall development as well as the idea that children should be given an opportunity to learn actively. A predominantly didactic classroom--with little or no scope for individual expression--was not considered to be appropriate for young children's development. Although these beliefs are in sync with the idea of DAP, it is difficult to gauge if the teachers' answers truly reflect their philosophy of teaching, or if these answers were based on social desirability and their teacher training experience, in which they were taught the fundamentals of DAP based on Western standards. This confusion between what is taught in their training programs and what they believe or actually practice in their classroom is evident in theme 6 (Struggle Between Belief and Practice).

Another possible explanation for teachers' discrepancy in their beliefs and practices lies in their tendencies to follow scripted behaviors in the classroom (Wien, 1995). Scripted behaviors are defined as "repeated patterns of routine practices that teachers use" (Wien, 1995, p. 12). These scripted behaviors evolve from teachers' actual experiences in their own classroom. Hence, a teacher may believe that it is important for children to experiment on his or her own or to indulge in creative activities. In reality, however, children may be coloring within pre-drawn circles during an activity conducted in the classroom, because this is what the teacher has always provided children as a part of the art activity, and over the years may have found this strategy to be successful with a large group of children in the classroom. However, this activity then becomes contrary to her beliefs. Educators in the United States have concentrated their efforts on understanding the impact of a DAP curriculum on children's development (Burts et al., 1992; Hirsh-Pasek et al., 1990; Jambunathan et al., 1999; Marcon, 1999; Schweinhart, Weikart, & Larner, 1997; Stipek, 1993). In this process, researchers have used teacher beliefs and practice scales to categorize classrooms as DAP or DIP (Marcon, 1999), or have directly compared various curriculum models that are academic or child-centered in their approach to education (Schweinhart et al., 1997). However, these studies demonstrate that it is somewhat difficult to
neatly divide classrooms into categories of developmentally appropriate or developmentally inappropriate. In Marcon's study, there was a third category that evolved, which took a middle approach to education. It was labeled as a middle of the road approach to education, while the Schweinhart et al. (1997) study described it as a combination of child-centered and didactic education. This is very similar to the three categories of education that were identified in the present study: play way method, talk and chalk method, and combination method. This similarity in the curriculum issue signifies that DAP or DIP beliefs or practices cannot be placed at the opposite end of the continuum and then compared to one another. One has to account for the middle approach that the teachers adopt in many preschool and kindergarten classrooms in the United States and India. This similarity in the findings across two different cultures is striking, and suggests that researchers and scholars in the field of ECCE re-conceptualize the concept of DAP.

Over the years, scholars in the field have argued against DAP being a universal concept (Lubeck, 1998; O'Brien, 1996). Some believe that what is inappropriate in Western cultures may be actually appropriate or inevitable in another culture (O'Brien, 1996). That is, deciding if an activity is appropriate or inappropriate depends on the needs and characteristics of that specific population or culture (Szente & Hoot, 2002). A few of the kindergarten classrooms in this study only allocated 30 minutes as free-play time for the children in their classrooms. This observation may be very specific to the Indian culture. The fact that kindergarten schools are only in operation a half day (2 1/2 to 3 hours) and that teachers in these schools are also required to teach children to read and write, makes it impossible for teachers to extend free play to more than 30 minutes. While this may not be considered an ideal DAP classroom in the United States, in India this may be a model classroom.

Similarly, the use of worksheets in kindergarten classrooms in India is prevalent and considered important for children's education. It is believed that the rationale for using worksheets in the classrooms offsets the belief that worksheets are harmful, developmentally inappropriate, and impediments to children's development. The large group sizes in India compel many teachers to use worksheets in their classroom as means of evaluating children's performance or as a tool to recap the concept that is taught in the classroom. Thus, taking into consideration the various constraints within which teachers are placed, use of worksheets is almost inevitable in the Indian context. The use of worksheets compels researchers to question whether worksheets are truly developmentally inappropriate in the Indian context. Nevertheless, Indian scholars are concerned that labeling worksheets as appropriate and recommending its use may actually increase the use of worksheets on a daily basis in classrooms. Additionally, the quality of the worksheets is a concern. Hence, assessing the quality of the worksheets developed by the kindergarten teachers and the time devoted to the use of worksheets in the classroom are issues that researchers need to examine.

Another issue that requires cultural sensitivity and is important within the domain of DAP and quality is that of group size and ideal ratios for kindergarten classrooms. The ratios
recommended for child care and kindergarten classrooms in the United States are lower and virtually impossible to be maintained in the Indian situation. Thus, generalizing or recommending a specific number of children as ideal for every kindergarten classroom in every country may not be reasonable. More studies in India need to explore these different parameters of DAP and then make distinctions between what is appropriate and inappropriate based on cultural relevance.

Studies in the United States are replete with findings demonstrating that teachers face numerous constraints in their classroom environments. These constraints influence teachers' beliefs and practices regarding developmental appropriateness. Teachers in the United States have reported lack of parental support or parents' lack of understanding of the child-centered method to be problematic to them (Goldstein, 1997; Hirsch-Pasek et al., 1990; Stipek et al., 1992; Stipek & Byler, 1997). Teachers in India voiced the same concern. However, a few of the points that the teachers mentioned in the study were unique to the Indian situation. One of them was a lack of sufficient play materials for children in the classroom. Some classrooms in India have materials that may not be age-appropriate, safe, or developmentally appropriate. Often, a lack of funds restricts schools from buying more DAP materials for their classrooms.

Scholars recognize that lack of respect for the early childhood care and education field, low wages, and fewer incentives may be lessening teachers' motivation to strive hard or do better in their classrooms. Teachers in the present study expressed their concern regarding these issues in their interviews. A similar situation exists for early childhood teachers in the United States (Katz, 1999). The National Child Care Staffing Study (Whitebook, Howes, & Phillips, 1989) found that child care teachers are paid much less than women who are equally educated as them, but work in different fields, or than men who have similar or comparable education levels. Similarly, U.S. kindergarten and elementary school teachers are known to earn lower wages than secondary school teachers (U.S. Bureau of Labor Statistics, unpublished analyses).

To conclude, the present study gives insight regarding how certain aspects of DAP are reinterpreted within a cultural context. Future research may want to delve into each of these issues and examine them in detail (e.g., concept of large group sizes, use of worksheets in the classroom, and so on). Further, this research also highlights the various types of curriculum that are prevalent in the kindergarten classrooms in the city of Mumbai. Not all kindergarten classrooms follow a didactic curriculum; some use a combination approach, while others are very child-centered in their approach. The schools whose approach to education is generally child-centered can be considered to be progressive. The present study describes the variability within the curriculum that exists in an urban city like Mumbai. Finally, the study also demonstrates the similarities in the issues that teachers face in India and United States. Teachers in both cultures cited the desire to earn respect as a teacher of young children, higher salaries, and the need for a strong support system.
Thus, within both countries, teachers are striving towards the same purpose—that is, providing high quality education and services to very young children. Hence, as an early childhood community, we can learn from one another and based on our common experiences, move ahead to address and overcome the barriers to best practice for children.

References


Suh, Y. S. (1994). The beliefs and values of parents, kindergarten teachers, and principals regarding public kindergarten programs and practices in Korea. (UMI No. 9439460)


Appendix A.

### Table 1. Interview Questions

<table>
<thead>
<tr>
<th>Interview</th>
<th>Question</th>
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<tbody>
<tr>
<td>1</td>
<td>Describe in general the major needs of children between the ages of 2-5 years.</td>
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<tr>
<td>2</td>
<td>How does your program support and address the needs of these children?</td>
</tr>
<tr>
<td>3</td>
<td>Describe the daily schedule or routine of your classroom.</td>
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<tr>
<td>4</td>
<td>Assume that you are allowed to plan your own curriculum for the class without any external pressure. Describe this classroom. How is it different from your classroom now?</td>
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<tr>
<td>5</td>
<td>Describe the role of play in kindergarten classrooms in India.</td>
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<tr>
<td>6</td>
<td>Describe the implementation of a play-based curriculum in your own kindergarten classrooms.</td>
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<tr>
<td>7</td>
<td>Are you completely satisfied with your work as a teacher and what you are doing in the classroom? Why or why not? What would you like to change?</td>
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<td>8</td>
<td>Lastly, do you have any recommendations for the Indian Government regarding the early childhood educational system of India? What are the strengths of the system? What kind of changes would you recommend?</td>
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<td>9</td>
<td>Anything else that you would like to add?</td>
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</tbody>
</table>

### Table 2. Curriculum Models

<table>
<thead>
<tr>
<th>CURRICULUM MODELS</th>
<th>Play Way</th>
<th>Talk and Chalk</th>
<th>Combination</th>
</tr>
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<tbody>
<tr>
<td>Free play</td>
<td>Free play does not exist in these classrooms.</td>
<td>Free play is offered to children twice a week.</td>
<td></td>
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<tr>
<td><strong>Classroom Schedule</strong> is flexible; it alternates between child-centered activities (free play or center time), small group activities, and large group activities.</td>
<td>Children work in groups all the time.</td>
<td>Children work mostly in large groups. Nevertheless, children have an opportunity to work in small groups some time during the day.</td>
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<tr>
<td>Children have <strong>many opportunities to actively</strong> construct knowledge and work creatively.</td>
<td><strong>Rote memorization is strongly emphasized</strong> in these classrooms.</td>
<td><strong>Rote memorization is one part</strong> of the curriculum and is used in combination with other methods and forms of teaching (e.g., children are allowed to work creatively while using the computers or doing art activities).</td>
<td></td>
</tr>
</tbody>
</table>